REMARKS

The Office Action dated March 26, 2007 has been received and reviewed. Claims 1–25 are pending in the subject application. All claims stand rejected. Reconsideration of the subject application is respectfully requested in view of the above amendment and the following remarks.

Rejections based on 35 U.S.C. § 112, second paragraph

Claim 4 stands rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to distinctly claim the subject matter of the invention. The Examiner specifies that the limitation "the predetermined time period" has an insufficient antecedent basis for this limitation in the claim. The Applicants respectfully disagree and direct the Examiner's attention to claim 3, which recites, in part, "summing the utilization values collected for each of the links connecting a Point of Presence pair of a *predetermined time period.*" (emphasis added). As such, it is believed that the objection to these claims has been overcome.

Rejections based on 35 U.S.C. § 102(e)

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdeggal Brothers v. Union Oil co. of California*, 814 F.2d 628, 631, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the . . . claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 2 USPQ 2d 1913, 1920 (Fed. Cir. 1989). *See also*, MPEP § 2131.

In the non-final Office Action dated March 26, 2007, claims 1-25 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Application Publication No. 2002/0143928 to Maltz et al. (hereinafter the Maltz reference). The claims of the present

application include independent claims 1, 5, 16, and 20. Applicants respectfully traverse the rejection of claims 1-25 as hereinafter set forth.

Referring initially to independent claims 1 and 5, a method for determining link utilization in an IP network is recited. Claims 1 and 5 provide a method including collecting utilization values for links in the IP network over a *predetermined polling period*; collecting *topographical information* for links in the IP network; and *correlating* the link utilization values with the topological information. A predetermined polling period includes a time period for polling. *See, Specification* at ¶ [0031], [0036]. For example, assuming link utilization values for five links are collected at five minute polling periods and link utilization is to be measured over a ten minute time period (and no data loss), the number of link utilization values should be ten (two values per link for five links). *See, Specification* at ¶ [0036]. As such, a predetermined polling period may differ from link utilization reported for a time frame. *See, Specification* at ¶ [0037]. Topographical information identifies which link or links connect each pair of adjacent PoPs. *Id.*

By way of contrast, the Maltz reference discloses a method and system for collecting and storing traffic data. *See, Maltz reference*, Abstract. Although the Maltz reference discloses that "link utilization can be calculated by measuring the number of bytes that flow out a line card interface *each second* and dividing by the total number of bytes the link can transmit in a second," the reference fails to disclose a predetermined polling period. *See, Maltz* reference at ¶ [0068]. Rather, *each second* pertains to a link utilization rate, i.e., number of bytes per second. As such, Maltz does not consider a predetermined polling period over which to collect utilization values for links in the IP network.

In addition, the Maltz reference fails to disclose collecting *topological information* for links. As used in the Maltz reference, network topology information "allows the TMS Statistics Collection Server to know where to go to collect the desired information. *See*, *Maltz* reference at ¶ [0080]. The network topology information preferably comprises (1) a list of network elements form which a given TMS Statistics Collection Server should collect information, (2) information identifying the type of equipment (i.e., vendor and product ID) comprising each network element, and (3) information indicating how communication should take place with that network element." *Id.* On the other hand, as previously mentioned, in the present application, topographical information identifies which link or links connect each pair of adjacent PoPs. *See, Specification* at ¶ [0037]. Accordingly, the Maltz reference does not discuss collecting *topological information* for links.

As Waltz does not describe each and every element of independent claims 1 and 5, Applicants respectfully request withdrawal of the 102 rejection with regard to claims 1 and 5. As claims 2 through 4 and 6-15 depend from independent claims 1 and 5, Applicants also respectfully request withdrawal of the 102 rejections with regard to those claims as well. Each of claims 2-4 and 6-15 depend, either directly or indirectly, from independent claims 1 and 5. As such, these claims are also believed to be in condition for allowance for at least the above-cited reasons. Each of claims 1-15 are believed to be in condition for allowance and such favorable action is respectfully requested.

In addition, dependent claim 3 and independent claims 5 and 20 refer to determining link utilization in an IP network. Dependent claim 3 recites, in part, "summing the utilization values collected for each of the links connecting a Point of Presence pair over a predetermined time period; and dividing the sum of link utilization values for each Point of

Presence pair by the number of utilization values included in the sum." Independent claim 5

recites, in part, "summing the link utilization values for each link connecting a pair of Points of

Presence; and dividing the sum of link utilization values for a pair of Points of Presence by the

number of link utilization values included in the sum." Independent claim 20 recites, in part,

"summing the link utilization values collected over a first predetermined time period for all links

connecting a pair of Points of Presence; [and] dividing the sum by the number of link utilization

values included in the sum to give an average."

By way of contrast, the Maltz reference discloses a method and system for

collecting and storing traffic data. *See, Maltz reference*, Abstract. Although the Maltz reference

discloses limiting the sum of traffic flowing on the paths and maximizing the sum of traffic along

all paths, the reference fails to disclose summing *utilization values* for *each link* connecting a

pair of Points of Presence. *See, Maltz* reference at ¶ [0049]. Additionally, the Maltz reference

also fails to disclose *dividing the sum of link utilization values* by the number of link utilization

values. The Maltz reference refers to summarization, but a mere reference to summarization

does not disclose dividing the sum of link utilization by the number of link utilization values.

See, Maltz reference at ¶ [0068]. As such, Maltz neither considers summing the utilization

values nor considers dividing the sum by the number of link utilization values.

As the Waltz reference does not describe each and every element of dependent

claim 3 and independent claims 5 and 20, Applicants respectfully request withdrawal of the 102

rejection with regard to claims 3, 5, and 20. As claims 6-15 and 21-25 depend from independent

claims 5 and 20, Applicants also respectfully request withdrawal of the 102 rejections with

regard to those claims, as well. Each of claims 6-15 and 21-25 depend, either directly or

indirectly, from independent claims 5 and 20. As such, these claims are also believed to be in

condition for allowance for at least the above-cited reasons. Each of claims 3, 5-15, and 20-25 are believed to be in condition for allowance and such favorable action is respectfully requested.

Referring to dependent claims 7 and 18, both claims recite "exponentially weighted moving average." An exponentially weighted moving average applies weighting factors which change exponentially. By way of contrast, the Waltz reference merely refers to a weight matrix. The Waltz reference includes no indication that such a weight matrix applies weighting factors which change exponentially.

As such, the Waltz reference does not describe each and every element of dependent claims 7 and 18. Accordingly, Applicants respectfully request withdrawal of the 102 rejection with regard to claims 7 and 18. As claim 19 depends from dependent claim 18, Applicants also respectfully request withdrawal of the 102 rejections with regard to claim 18 as well. Each of claims 7 and 18-19 are believed to be in condition for allowance and such favorable action is respectfully requested.

With reference to dependent claim 11, dependent claim 11 refers to a method for determining link utilization. Dependent claim 11 recites that downloading configuration information comprises downloading the name of each router, the Point of Presence containing each router, all *active* links connected to each router, and the destination of each active link connected to each router. On the other hand, the Waltz reference fails to mention any such *active* link.

As such, the Waltz reference does not describe each and every element of dependent claim 11. Accordingly, Applicants respectfully request withdrawal of the 102 rejection with regard to claim 11. As claims 12-15 depend from dependent claim 11, Applicants also respectfully request withdrawal of the 102 rejections with regard to claims 12-15 as well.

Each of claims 11 and 12-15 are believed to be in condition for allowance and such favorable action is respectfully requested.

Dependent claim 21 includes multiplying the average by the number of links connecting the pair of Points of Presence. The Waltz reference, on the other hand, discusses forming predictions by "averaging the last 10 measurements, then the TMS Statistics Collection Server can be equipped with enough storage so that it can store 10*X bytes of network information" in cases where X bytes of network statistics are collected every T seconds. *See*, *Maltz* reference at ¶ [0074]. Such a prediction, however, is vastly different than multiplying the average by the number of links connecting a pair of Points of Presence. Rather, the Waltz reference does not even discuss the number of links connecting a pair of Points of Presence.

As such, the Waltz reference does not describe each and every element of dependent claim 21. Accordingly, Applicants respectfully request withdrawal of the 102 rejection with regard to claim 21. As claims 22-25 depend from dependent claim 21, Applicants also respectfully request withdrawal of the 102 rejections with regard to claims 22-25 as well. Each of claims 21-25 are believed to be in condition for allowance and such favorable action is respectfully requested.

Rejections based on 35 U.S.C. § 103

Claims 4, 13, 19, and 22-25 were rejected under 35 U.S.C. § 103 as being obvious by U.S. Patent Application Publication No. 2002/0143928 to Maltz et al. Claims 4, 13, 19, and 22-25 each depend, either directly or indirectly, on one of independent claims 1, 5, 16, and 20. Because each of independent claims 1, 5, 16, and 20 are believed to be in condition for allowance, as discussed hereinabove, Applicants respectfully traverse the rejection of claims 4, 13, 19, and 22-25.

CONCLUSION

For at least the reasons stated above, claims 1-25 are now in condition for allowance. Applicants respectfully request withdrawal of the pending rejections and allowance of the claims. If any issues remain that would prevent issuance of this application, the Examiner is urged to contact the undersigned to resolve the same. It is believed that no fee is due, however, the Commissioner is hereby authorized to charge any amount required to Deposit Account No. 19-2112.

Respectfully submitted,

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